OUT56296

P 282231Z
FM NPIC WASHDC
TO RUCSC/SAC OFFUTT AFB OMAHA NEB
RUCVAA/4080 STRAT WG OL 19 BARKSDALE AFB LA
RUCVAA/2D RTS BARKSDALE AFB LA
RUEKDA/DIA WASHDC
RUECYH/NAVRECONTECHSUPPCEN SUITLAND MD
RUEPIA/CIA WASHDC
RUWBKN/15TH AF MARCH AFB RIVERSIDE CALIF
RUWGAA/2AF BARKSDALE AFB LA
BT
S E C R E T CITE NPIC 5072.

15TH AF (FOR DI), SAC (FOR DIM/GOLDEN TREE/DOCR, DM 4) 2D AF (FOR DI).

1. CAMERA SYSTEM 111-B WAS USED IN MISSION 8032 FLOWN ON 24 JULY 1965. PROCESSING APPEARS TO HAVE BEEN ACCOMPLISHED BY BARKSDALE.

29 JUL 1965

RECEIVED

Office	Act.
ADMIN	
BR	
ICB	
PAG	
DIAXX-4	
SPAD	
NSA-LO	
DIA-AP	

2. ORIGINAL NEGATIVE:

THE EXPOSURE VARIED FROM SLIGHTLY UNDER TO ADEQUATE. THE RESOLUTION IS NOT WHAT WAS ANTICIPATED FROM THIS SYSTEM. A TOTAL OF 1377 FRAMES, IDENTIFIED BY A DIGITOTE COUNTER AS FRAMES 0026 THROUGH 1403, WERE EXPOSED ON THIS MISSION. THE DIGITOTE COUNTER SKIPPED FROM FRAME 1157 TO 1159. THE GENERAL QUALITY OF THE MATERIAL IS DEGRADED BY AN OUT-OF-FOCUS CONDITION PROBABLY CAUSED BY EITHER A THERMAL CONDITION IN THE CAMERA BAY OR CONDENSATION ON THE WINDOW SURFACE OR OPTICS. NEAR OPTIMUM IMAGERY IS INTER-SPACED THROUGHOUT APPROXIMATELY 01 PERCENT OF THE MISSION. (EXAMPLES: FRAMES 1289, 1293 AND 1334).

IN ADDITION TO THE LESS THAN OPTIMUM RESOLUTION THE FOLLOWING ANOMALIES WERE DETECTED:

A. VARYING DENSITIES ACROSS THE FORMAT CAUSED BY ERRATIC SHUTTER TRAVEL. THESE UNDULATIONS APPEAR IN ALL FRAMES EXCEPT WHERE THE TEXTURE OF THE IMAGERY PRECLUDES DETECTION.

B. LOSS OF VACUUM IN THE LAST FRAME OF MOST CAMERA OPERATIONS.

C. A MINOR LIGHT LEAK CAUSED A PLUS DENSITY STREAK IN THE LAST FRAME OF EACH CAMERA OPERATION.

D. THE THIRD AND FOURTH FRAME OF EACH CAMERA OPERATION CONTAIN LONGITUDINAL SCRATCHES AND ABRASIONS WHIGH APPEAR TO BE CAUSED BY TAKING UP SLACK FILM WHEN THE TRANSPORT SYSTEM IS REACTIVATED.

E. THE FRAME NUMBER AND THE WORD "RIGHT" FAILED TO APPEAR IN ISOLATED OCCASIONS BECAUSE OF IRREGULAR TRACKING OF THE FILM.

F. MINUTE PARTICLES OF EMULSION OR DIRT ACCUMULATED IN THE TAKE-UP CORNER ALONG THE DIGITOTE EDGE OF THE FORMAT CAUSING SMALL MINUS DENSITY AREA.

G. A PARTIAL DOUBLE EXPOSURE OCCURS IN FRAME 1159. APPARENTLY THE FILM DID NOT METER PROPERLY AFTER THE EXPOSURE. WHEN THE SHUTTER HAD TRAVELED HALF THE DISTANCE ON THE FOLLOWING FRAME THE FILM MOVED INTO ITS PROPER POSITION CAUSING ONE QUARTER OF FRAME 1159 TO BE DOUBLE EXPOSED AND ONE QUARTER OF FRAME 1160 TO RECEIVE NO EXPOSURE.

H. EXCESSIVE RATE OF CHANGE IN THE ROLL ATTITUDE OF THE VEHICLE CAUSED SEVERE CROSS-TRACK SMEARING OF THE IMAGERY IN APPROXIMATELY 30 FRAMES.

I. APPROXIMATELY 20 FRAMES CONTAIN DOUBLE IMAGERY ALONG THE LONGITUDINAL AXIS OF THE MATERIAL. THIS APPEARS TO BE CAUSED

BY VIBRATIONS OF THE CAMERA SYSTEM, INTERNAL REFLECTIONS FROM THE OPTICS OR AN EXCESSIVE THERMAL ANOMALY OF ONE OF THE MIRRORS.

3. POSITIVE:

A. THE SCALE OF THE PHOTOGRAPHY PROVIDES SUFFICIENT INFORMATION TO STATE THAT THE PI SUITABILITY IS GOOD IN SPITE OF THE LESS THAN OPTIMUM RESOLUTION.

B. THE PRINTING AND PROCESSING ARE GOOD. ENLARGEMENTS OF 15X WERE MADE FROM THE NEGATIVES WITHOUT LOSS OF DETAIL.

C. CLOUDS OBSCURED APPROXIMATELY 40 PERCENT OF THE TERRAIN.

4. THE SMALL AREA COVERED BY EACH EXPOSURE CAUSES DIFFICULTY IN THE LOCATION OF THE PHOTOGRAPHY EXCEPT IN WELL KNOWN OR RECOGNIZED AREAS. IF THE SYSTEM CLOCK COULD BE SYNCHRONIZED WITH THE PILOTS CLOCK AND A RECORD OF THE TIME AT THE START OF EACH CAMERA ACQUISITION RECORDED AND FORWARDED WITH THE MATERIAL IT WOULD MATERIALLY EXPEDITE THE READOUT.

S E C R E T

/END OF MESSAGE/